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said sealing and severing means includes rigidly mounted actuators coupled to pivotally mounted members which provide parallel movement of one relative to the other.--

REMARKS

Claims 1-17 are pending in the application. Claims 1-8 have been withdrawn from consideration.

Initially, it should be noted that a typographical error on page 7 of the specification has been corrected, namely the word "she" appearing at line 12 has been changed to --for--.

Claims 9 and 12-16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over the patent to Merritt (3,094,823) in view of Fiesser (5,475,964). According to the Examiner, the patent to Merritt shows a packaging machine with a feeder spool holding a folded packaging means, an inverting mechanism comprising feed rollers 20,30 and V-shaped wires 50,51 that reposition and open the folded material so that the fold is in a vertical orientation and a sealing and severing means 55,56 downstream from the inverting mechanism comprising a heated bar with a flat head and an opposing sealing surface with a sharp surface. The Examiner admits that the Merritt device lacks the specific type of sealer recited in the claims. The Examiner asserts, however, that the patent to Fiesser shows a packaging machine in which a tubular film containing articles is transversely sealed by opposing members wherein

one is a heated flat bar 26 and a non-heated, sharp cutting surface 25 that provide a clean cut in the film. The Examiner concludes that it would have been obvious to one skilled in the art to substitute the sealing mechanism of Fiesser for the sealing mechanism of Merritt to provide for a cleaner cut. The Examiner further states that the use of adjusting means (claim 14) to adjust the position of a well known mechanism would have been an obvious modification to one skilled in the art to permit the handling of different size articles.

First, it should be noted that the Examiner has failed to address an important limitation of claim 9, namely that the unheated sealing surface is resilient, i.e., "resilient, non-heated sealing surface having a sharp profile." None of the sealing surfaces disclosed in the art are resilient. Moreover, the sharp surface 39 in Fiesser et al. is a severing surface, not a sealing surface. It appears that the sealing surfaces are the rounded portions 40. Nevertheless, there is no teaching or suggestion that any of these components be resilient. For these reasons, the rejection of claims 9 and 12-15 which depend from claim 9 must fail.

With regard to claim 16, although resilient is not mentioned in the claim, it should be pointed out as above that the sharp surface 39 in Fiesser et al. is a severing surface, not a sealing surface. Although very little discussion is given to these elements, it appears that the sealing surfaces are the rounded portions 40 and that the sharp portion 39 only severs and does not seal.

Claims 10 and 11 stand rejected under 35 U.S.C. 103(a) as being unpatentable over the patent to Merritt in view of Fiesser, as applied above, and

further in view of Fukuda (5,347,795) or Goodwin (3,766,710). The Examiner admits that the Merritt and Fiesser combination lacks the showing of gear connected pivot arms claimed in claims 10 and 11. The Examiner concludes, however, that it would have been obvious to one skilled in the art to provide the sealing mechanism of Merritt with a supporting pivoting structure as shown by Fukuda or Goodwin so that a more synchronized operation of the sealing arms is achieved. In the case of Fukuda, the use of a piston instead of a motor to actuate the sealing arms would have been an obvious modification according to the Examiner.

Since claims 10 and 11 depend from claim 9, the arguments made above regarding claim 9 apply to this rejection as well. Moreover, although the Examiner's stated incentive for combining the references sounds credible in hindsight, the incentive to combine must be shown in the prior art. This, the Examiner has not done. His stated incentive to combine the references is simply his personal opinion why one might have combined the references.

MPEP 706.02(j) "Contents of a 35 U.S.C. 103 Rejection" provides in part as follows:

"To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success

must both be found in the prior art and not based on applicant's disclosure." [Emphasis added.]

The above remarks regarding section 103 rejections also apply to the rejections of claims 9 and 12-16. In rejecting these claims, the Examiner has not made the showing required by MPEP 706.02(j).

New claim 17 has been added. Claim 17 claims the feature that although the sealing and severing means are moved on pivot arms, they move parallel to each other rather than in an arc. See the discussion of Figures 9(a) and 9(b) in the instant specification.

As admitted by the Examiner, neither Merritt nor Fiesser teach any kind of pivot arm assembly. It should be noted that the pivot assemblies taught by Fukuda and Goodwin do not move the severing means in the parallel manner claimed in claim 17. They are moved through a circular arc.

The Examiner cites the patent to Berg for showing a tubular film cutting and sealing means that includes heated elements on one side of the tube and a non-heated cutter on the other side of the tube.

Berg shows two distinct and separate mechanisms for accomplishing seal and cut. There is also no resilient material shown or suggested by Berg in the severing or sealing apparatus. Unless there is ample space between the heated sealing elements (13) and (15) and (12) and (14), which makes for an extraordinarily large mechanism, the heat transfer into the cutting blade (18) will result in material build up on the blade requiring constant maintenance.

Finally, Applicant hereby requests a one-month extension of time in which to respond to the outstanding Office Action. Credit Card payment form no. PTO-2038 for fifty five dollars (\$55.00) is enclosed. Any fee deficiency or overpayment may be charged or credited to applicant's Deposit Account No. 07-0130.

In light of all of the above, it is submitted that all of the claims are in order for allowance, and prompt allowance is earnestly requested. Should any issues remain outstanding, the Examiner is invited to call the undersigned attorney of record so that the case may proceed expeditiously to allowance.

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Respectfully submitted,

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Enclosures: Version with markings to show changes to specification
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Referring now to Figure 8, the sealing and severing system 116 includes an L-shaped heated bar 140 and a corresponding L-shaped sealing surface 142. The heated bar 140 is mounted on a first pivot arm 144 and the sealing surface 142 is mounted on a second pivot arm. Each pivot arm has a pair of spaced apart pivot points 144a, 144b, 146a, 146b. The pivot points 144a and 146a are coupled to each other by a rod 148a and two gears 150a, 152a. The pivot points 144b and 146b are coupled to each other by a rod 148b and two gears 150b, 152b. The pivot arms 144, 146 are actuated by a pair of spaced apart piston actuators 154a, 154b, each having a piston rod 156a, 156b as shown in Figure 8. The gear and bar couplings allow the L-shaped members to maintain a parallel relationship [she] for sealing and severing as illustrated in Figures 9a and 9b. As shown in Figure 9c, the heated bar 140 is flat faced and surrounded by a clamp 158. The sealing surface 142 is provided with a sharp contour 160. When the sealing and severing system is actuated, the clamp 158 holds the plastic film against the sealing surface 142 and the heated bar 140 moves forward to press the film 104 onto the sharp contour 160 of the sealing surface. This system provides sealing and severing without buildup of plastic material on the heated bar 140 because the severing is actually performed by the contour 160 on the cool sealing surface 142 rather than by the heated bar.